

Grain



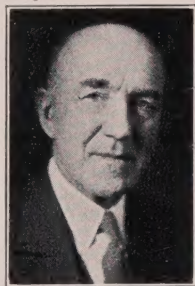
April
1940

The Stoutest Oak Was Once A Stripling

Out of patience with youth will come the future leaders

By M. Frank Beyer

THE sturdy, giant trees which stand in the forest without bending before wind or hurricane are not usually those trees which have been transplanted from other forests or moved about from place to place. Where they stand today, they were born. Here they first stretched their matted roots into the soil, and here they learned to withstand both storm and blight. Here they once were striplings, and here they slowly grew from striplings into the giant oaks that they are today.



Frank Beyer

Industry and many of its leaders might with great profit to themselves sit quietly—as Omar once did—beneath a giant tree and ponder the source of their strength and their security.

AND THEY WILL LEARN—

If they stop to think as Omar did—that youth in industry is like the stripling that comes before the tree. As it is nourished with sympathy, understanding, tolerance and time, so it will grow to be firm and worthy.

They will learn that those organizations are the soundest which have reared their men and trained them within their own walls and fired them with the particular inspiration and ideals that make up the organization's fighting spirit. They will learn that the quickening pace of business calls for more young blood than it did twenty-five years ago, and that this need for young blood calls for understanding on the part of those who are at the helm today.

THEY WILL DISCOVER—

If they ponder as Omar did—that the sturdiest tree was once a mere stripling, frail and easy to bend; but that nature housed it and succored it until it was able to stand alone—on its own trunk—in the face of the fiercest gale. They will learn that those who are charged with the rearing of the youth in industry owe not only sympathy and patience to youth as it gropes its way through a bewildering world, ever new and ever changing; but that those who plant with patience and care will reap the largest reward.

The tragic spectacle in the world of commerce is the sight of thousands of men who are tossed like corks in an ocean, from company to company, from job to job, drifting like a long file of ghosts from desk to desk, hopelessly, endlessly. How many of these might have been saved for themselves and for industry if someone, charged with their care, had been a little more patient, a little more inclined to remember the day when he, too, was a stripling ready to crack at the first blast but saved by the sheltering hand of someone who understood.

Can you, without risking a broken arm, pat yourself on the back and say, "I can look myself straight in the eye and say I have followed the golden rule?" Have you done unto others as you would have had them do unto you? Think about that. Have you ever been responsible for that first push that made the stripling bend?

ONCE THE STRIPLING IS BENT—

Even slightly—it continues to bend more and more each day. The force of gravity never ceases. It's always on the job. It pulls and pulls on everything that is the least bit out of plumb. The leaning tower of Pisa, for example, continues to lean more and more each year. It has been

leaning for a long time. From its top gallery, Galileo demonstrated the first laws of gravity in 1590. Today a plumb line dropped from its top would touch the earth fourteen feet away from the wall of its first gallery. It is still safe, engineers say; but ultimately, gravity will get it.

When a man begins to lean on his foundations, he is in danger. There is a pulling power which inclines him to lean more and more. If he starts to lean early in life because of some bad habit or serious fault, he is likely to fall completely sooner or later. Straight up and four-square is the only safe way for a man to grow.

The hardest thing in the world to do is to do right. If your foot slips, you may recover your balance; but if your tongue slips, you cannot recall your words. Live and act, so that when you come to die, even the undertaker will be sorry.

I have to live with myself, and so
I want to be fit for myself to know.
I want to be able as the days go by,
Always to look myself straight in
the eye.

I don't want to stand with the setting
sun
And hate myself for the things I've
done.

I want to go out with my head erect,
I want to deserve all men's respect.
I want to be able to like myself,
But here in the struggle for fame and
pelf

I don't want to look at myself and
know
That I am bluster and bluff and
empty show.

I never can hide myself from me,
I see what others may never see.
I know what others may never know,
I never can fool myself, and so
Whatever happens, I want to be
Self-respecting and conscience-free.

Editorial

THE CONVENTION

THE Society of Elevator Superintendents last month presented the latest edition of its practical, comprehensive conventions. At Toronto, for example, the following information was available:

Barley, low-grade, for which there is little malting-house demand, makes excellent feed. Dr. Crampton, Macdonald College, presented this advice.

Loading spout elbows will wear almost forever if they are lined with cement troweled against a wire mesh lining in a manner described by T. C. Manning.

An automatic car shovel can be rigged up by any millwright-mechanic who saw the Frauenheim model demonstrated by the designer.

Soy-bean breakage can be reduced in loading by introducing a choke into the spout in the way that Earl R. Evans described.

These four items of inestimable value to every Superintendent in active service are only an example of the type of program that was arranged. Yet only one hundred and thirty took advantage of this opportunity to learn what other Superintendents had long suffered to devise, — an opportunity that comes only once a year. The ideas exchanged were worth a thousand dollars or more yearly to every one attending. Yes, brother dust eaters, if you were not there you and your firm are already at a competitive disadvantage, and one which will widen with each successive year this progressive body holds conventions.

GRAIN, Board of Trade, 141 W. Jackson Boulevard, Chicago, Ill. • Telephone Wabash 3111. A forum for operative and mechanical problems in terminal elevators. Published monthly on the tenth, \$1.00 per year. DEAN M. CLARK, Publisher; JOE MOSEY, Editor; WERNER HAUPTLI, 56 W. 45th Street, New York, Murray Hill 2-8763.

Elevator Superintendents Talk Politics and Shop at

The 11th Annual Convention

Held at Toronto's
Royal York Hotel

ONE hundred and twenty-nine delegates of the Society of Grain Elevator Superintendents gathered at Toronto to hear eleven outside experts—in addition to their own member-authorities, join in four round table discussions, visit elevators and industrial plants to mark the Eleventh Annual Convention at the Royal York Hotel, April 1 to 3.

Government Relations

▲ Welcomed to Toronto by A. A. Screaton, Treasurer of Toronto Elevators, Ltd., and to Canada by Jack Smith, Manager of the Sarnia Elevator Company, Ltd., Sarnia, the convention lost no time in getting down to business. For an hour it listened with active interest to an outline of government relations with the elevator industry in the United States delivered by Ray Bowden, executive vice president of the Grain and Feed Dealers National Association.

Garnished heavily as it was with illustrative anecdotes in Minnesota's Swedish dialect, Mr. Bowden's address pointed out three phases of the relationship with government. Two were historical: the period during which the government, through its agencies, lent aid to the small elevators that were struggling to form a major industry; and the period during which government aid went to the coöperative establishments while being more or less withheld from the independent industry that it had succeeded in establishing. At the present time, Mr. Bowden pointed out, government relations with the elevators is entering a third phase wherein privileges are being withheld from both coöperative and private institutions. Just what significance was to be imputed to this new situation Mr. Bowden preferred that his audience decide.

Society President T. C. Manning, Uhlmann Grain Company, Kansas City, followed Mr. Bowden with a review of the past year's record and restated the purposes and aspirations of the group.

NEW OFFICERS

▲ Elected at the Toronto convention to serve the Supers' Society during the coming year were:

Percy C. Poulton, Fort William, President.

Paul Christensen, Minneapolis, First Vice President.

H. L. Heinrikson, Sioux City, Second Vice President.

Gilbert Lane, Chicago, Director.

Andrew Rankine, Montreal, Director, malting plants.

H. C. Brand, Cedar Rapids, Director, cereal plants.

W. A. Thomson, Jr., Louisville, Director, feed processing plants.

Wheat Types

▲ Dominion Cerealists to the Canadian Department of Agriculture and a pioneer in the study and development of wheat types best suited to Canadian conditions, Dr. L. H. Newman of Ottawa addressed the delegates on the production and testing of new varieties of wheat.

Prefaced by a historical sketch of wheat-growing in colonial and 19th century Canada, Dr. Newman's address recounted the advantages of production and storage that were inherent in the better types of grain that has been fostered by his department. Wheat that is more resistant to infestation, that has better milling qualities is the result of years of concentrated work and study.

Trucking Problems

▲ H. L. Heinrikson, Terminal Grain Corporation, Sioux City, Iowa, read a paper on "Grain Elevators and Railroads vs. Trucks" in which he pointed out the possible consequences of new transportation practices in regard to the elevator industry.

G. L. Parsons, President of Gode-rich Elevator and Transit Company, stressed the danger of metals and debris which might cause explosions or damage to machinery in a paper entitled "Unloading Headaches." Methods of removing tramp metal from the grain stream and other practices in behalf of safety were discussed by Mr. Parsons.

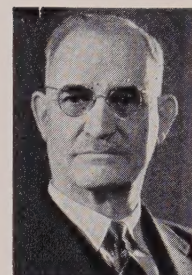
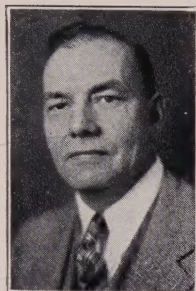
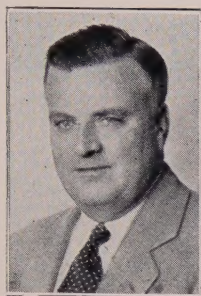
Paul Christensen, Van Dusen-Harrington Company, Minneapolis, addressed the group on the government policy of storage of grain in steel tanks. In view of the fact that the steel tanks have been purchased by local county agencies under a trade-out storage agreement, it would seem that these tanks are here to stay, Mr. Christensen indicated. He urged every United States member of the Society to complain to his Congressman about this threat to the terminal storage business of the elevators.

T. C. MacNabb, General Superintendent, Canadian Pacific Railway, St. John, described "Handling Grain Through St. John." The two elevators there have been built back from the wharf in order to permit the handling of package freight. Conveyor belts carried on steel towers 25 feet high deliver the grain to a traveling loader equipped with telescopic spouts to justify the rise and fall of the tide through 24 feet.

Normally, Mr. MacNabb explained, a tramp ship will carry 300,000 bushels; but the fact that these ships have to be prepared to receive the grain and have to trim the cargo after it is loaded means that it takes somewhat longer than the 14 hours required to deliver the grain for the ship to clear.

St. Lawrence Brief

▲ Dinner served in a banquet room of the hotel was followed by a brief on the proposed St. Lawrence waterway read by Captain F. J. Davis, Secretary of the Canadian Navigators Federation. Opposed to this project as it is now planned and supporting a plan of modernizing and re-building



Officers and Directors of Superintendents' Society. Left to right: Percy Poulton, Fort William, President; Paul Christensen, Minneapolis, First Vice President; H. L. Heinrikson, Sioux City, Second Vice President; Gilbert Lane, Chicago, Director; H. C. Brand, Cedar Rapids, Director; T. C. Manning, Kansas City, Retiring President.

the present 14-foot channel to the sea, Captain Davis pointed out the number of elevators that would be passed up by ocean-going vessels and the number of men that would be unemployed if ships from foreign countries could proceed to Fort William and Duluth instead of tying up in the mouth of the river.

Captain Davis also suggested that perhaps the competition that would be created with the Erie canal route to the sea might mean the re-building of that channel to accommodate ocean-going vessels of 24-foot draught.

Following Captain Davis, George Leacock, President of the Moloney Electric Company, Toronto, and brother of humorist Stephen Leacock, explained the historic depression of world grain prices and apologized for his part in the production of huge surpluses. It seemed, he confessed, that he had taken to farming when wheat was \$2.00 a bushel and since that time the price had fallen to as little as 50c just to prove what concentrated effort could do in the way of production.

When Mr. Leacock became President of his firm his first official act was to find himself a place in the country within driving distance of Toronto inasmuch as that was the approved manner of residence for corporation Presidents. In answer to his first advertisement, he received a response from Vancouver, — driving time to Toronto eight days. Mr. Leacock explained that he liked the place very much but that in eight days he would miss a pay day. So he had to content himself with a farm just north of Toronto. There today he runs a comparatively successful venture by refraining from making unwarranted investments in potato-digging or bee-keeping.

Care of Conveyor Belts

▲ A trip through the plant of the Dunlop Tire and Rubber Company

Associates Night Ends Convention

▲ Under Chairman Grover Meyer, Kansas City Light and Power Company, the associates committee of the Supers' Society arranged a dinner-dance to mark the end of the three-day convention at Toronto.

An orchestra and chorus entertained following the dinner (fried chicken, peas, French pastry), and a floor show of 14 acts amused the delegates and their guests. Hit of the show: a black-faced ventriloquist's dummy.

Mrs. J. Brunell, Port McNicoll, whistled two selections and Miss May Wilkinson, Midland, sang several Scottish folk songs.

featured the Tuesday morning session of the convention. The interest of the Superintendents centered on the manufacture, the proper installation and care of conveyor belts.

With Percy Poulton, N. M. Patterson & Company, Fort William, presiding, the delegates listened Tuesday afternoon to Dr. E. W. Crampton, McGill University, Quebec, discuss the "Comparative Value of Barley for Finishing Hogs." Dr. Crampton showed slide charts of the chemical compositions of various feeds, but pointed out that as these feeds appeared to the chemist they did not always appear to the pig. Whether or not a certain feed contained the essentials of a perfect ration depended more on whether or not these essentials were in a form that could be assimilated by the animal, Dr. Crampton pointed out.

For that reason, experiments have been designed to test the feed under actual feeding conditions and not in laboratory. Under these conditions barley as a basis for the ration was charted and found best of grains for feeding.

Power Rates

▲ T. C. James, district engineer of the Ontario Hydro-Electric Development Commission, explained the organization of his commission in the production and distribution of power throughout the province. From the plants at Niagara Falls, electrical energy is sent through local municipal commissions to every city. Rates are set by the local commission under the supervision of the central body. Mr. James explained the basis for rates and the justification for the demand charge basis as it applies to grain elevators and other users of industrial power.

Grain Cleaning

▲ Conducted by Maynard Losie, Hallet & Carey Company, Minneapolis, the grain cleaning clinic led into a discussion of the equipment now on the market for this purpose. Mr. Losie discussed a letter from the Omaha Chapter which dealt with set-up or plugged cars. Said he: "The practice of loading a car with two grades of grain may have been instituted with the best intent, but it has only encouraged the small shipper to ship musty, damp grain. If his car does not get by the sampler, there is no penalty; while if it does, then the buyer is defrauded. When it is discovered, it is then up to the Superintendent to wave his magic wand and separate the two grades."

Moisture-Testing

▲ In transition from grain cleaning to moisture testing, Mr. Losie pointed out that "there is trouble with the new Tag moisture-tester. The trouble is that it does not work under all circumstances, especially when you have high and low grade samples and do not allow the samples to stand for a long enough time. It is the order of the Federal department to use the Tag exclusively. That should be changed so that you can use the Brown-Duval tester, too. There are



Top, left to right: Art Osgood, Minneapolis; Russ Maas, Hammond, Ind.; Barney Weller, Chicago; W. H. Kent, Chicago; Harry Olson, Chicago, and Paul Christensen, Minneapolis, first vice president-elect. Second row, left to right: Grover C. Meyer, E. I. Odell, T. C. Manning, W. H. Kamp and H. J. Hixson, all Kansas Citians. Bottom row, left to right: Henry Richardson, Clifton, N. J.; Clem Herdegen, Buffalo; B. J. Many, Chicago; C. H. Halsted and E. E. Fraunheim, Jr., Buffalo.

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President Manning rose to say, "We have to make tests on mixed corn. The only way I see to do it is to revert to the Brown-Duval. We mixed a bin of 21% with a bin of 12% in order to determine how long it would take for that corn to show up on the Tag or the Steinlite as uniform corn. We ran the test under government supervision, drawing off 500 bushels each day. It was eight days before all samples tested alike. That was two years ago and the figures are available through the department. I think that if we get another year or so of wet corn, we'll be back to the Brown-Duval."

Estimating Bins

▲ C. H. Halsted, Washburn-Crosby Company, Buffalo, led the bin-estimating discussion with the story of his efforts in search of an accurate method. "With the aid of an engineer," he said, "in making extensive tests and checking them carefully, we have evolved a formula that does the work very well for us. It took us 14 months to do this, but we find the results very satisfactory. For example, one bin weighed 1,551,250 pounds by scale and 1,553,800 pounds by measurement."

"In Canada, such procedure is out of the question," pointed out J. A. Smith, Sarnia. "The Government is responsible for every bushel of grain and therefore we have to be weighed up."

Loading Problems

▲ The wearing away of loading spout elbows was discussed by President Manning. His remedy: "We have lined our spouts with a cement coat applied over a small mesh chicken wire which has been anchored to the spout with bolts. The cement is troweled in, and after the first few loads, becomes as slick as glass. We first used this method several years ago and none of the spouts thus treated has had to be renewed."

"We use the same method," said W. H. Kamp, Ralston-Purina Company, Kansas City. "But instead of cement, we use lead. This we find fills up the space between the spout and the wire mesh, and thus prevents a breeding place for weevil."

Successful in his attempts to find a way to reduce breakage in loading soy beans, Earl R. Evans, Champaign, offered the following solution to the problem: "To prevent the beans from

Supers Talk Shop and Politics

times when you just can't wait for the Tag system."

J. R. Coughlin, Brooks Elevator Company, Minneapolis, emphasized the time element of Tag testing by pointing out that a mixture of two grades would have to blend for three or four days before you would get an accurate test.

"On mixtures that have not had time to blend," said E. E. Fraunheim, Buffalo Forwarding Corporation, Buffalo, "the Tag jumps up and down like a jumping jack. You have to put the sample in a tin can and wait for 24 hours. All the while your cars are interned."

"That jumpy reading," H. L. Heinrichson, Sioux City, explained, "means that you have an unevenly loaded car of acid corn. That is one place the

Tag comes in handy. It is close enough on a truck load. Of course, acid corn won't keep; but if you get a smooth reading on the Tag, you will know that you have a uniform load and everything else is all right."

Lewis Inks, Quaker Oats Company, Akron, said that his "experience with the three testers was that the Steinlite was slightly higher than the Brown-Duval and lower than the Tag. The Federal department says that you must run samples on the Tag unless you can use the Brown-Duval. This is official. We equalize our samples for twenty-four hours before we make the tests."

"In Canada there is no trouble," said Percy Boulton, Fort William. "We simply take what the government says."

Convention

coming down the spout with great force, we have blocked the end of it. When the spout is filled from the scale hopper to the blocked end, we pull the block and the beans drop in a continual stream. Though this is fast, it does not allow the beans to whirl against the sides and break."

E. E. Frauenheim exhibited a model of his lately-perfected automatic shovel. By means of a block anchored at the end of the car, Mr. Frauenheim has introduced a line to drag the ordinary power shovel back to its starting place. This eliminates the need for a man in the car after the block is placed.

The operation of the shovel is a continuous, reciprocal motion, biting into the grain on the forward pull and sliding back over it on the return. Two drums are used, one on the forward pull, the other to return the shovel.

Safety Talks

▲ Featured speaker at the Wednesday morning safety session, W. Dean Keefer, Lumbermen's Mutual Casualty Company, Chicago, detailed progress of accident prevention campaigns and outlined a basic program that could be adapted to different needs.

Motion pictures by the Department of Agriculture ("Dangerous Dusts") and by S. C. Klaus, Zeleny Thermometer Company, Chicago, showed first the formation and behavior of dust clouds and second the results. Mr. Klaus' pictures were made during the disastrous fire that destroyed the two Norris and three Calumet elevators in Chicago last year. The danger of falls and injury resulting from falls was the subject of still another film entitled "The Fall Guy."

Remarks by Oscar Olsen, Peavey Elevator, Duluth; C. H. Halsted, Buffalo; and Secretary Dean Clark, Chicago, explained the organization of safety contests, the expense involved and how safety appropriations could best be spent.

A short talk by R. B. Morley, Industrial Accident Prevention Associations, Toronto, described the work of that organization and enumerated several examples of definite reductions through concentrated programs of prevention. At the conclusion of the safety session, awards for the best accident records of the past year were made by President Manning.



Top, left to right: G. S. McPhee, Winnipeg; Secretary Clark, Chicago; Vic Reid, Minneapolis. Second row, left to right: Norman Bowdway, Collingwood; Vic Oliver, Minneapolis; Harry Olson, Chicago; Jim Mackenzie, Three Rivers. Bottom row, left to right: G. J. Shaw, Port McNicoll; Fred Sibbald, Fort William; Oscar Olsen, Duluth.

Safety Trophies Are Presented at Toronto

▲ Winners in the annual safety contests sponsored by the Society of Elevator Supers were presented with silver trophies during the final session of the convention. The winners:

Oscar Olson, Peavey-Duluth Terminal, first place in the annual contest with a record of 91,620 man hours without a lost-time accident.

Percy C. Poulton, N. M. Paterson and Company, Fort William, second with a record of 60,768 man-hours.

John Goetzinger, Rosenbaum Brothers, Omaha; and Frank McLean, Superior Elevator Company, Port Arthur, honorable mention.

In the all-time contest, winner was Superior Elevator Company's Frank McLean, who, since Oct., 1935, has worked a total of 118,948 man-hours without a lost-time accident.

Second went to Oscar Olson for a record of 97,985 man-hours begun in Oct., 1938.

Honorable mention went to Percy Poulton for 88,658 man-hours; W. H. Kamp, Ralston-Purina company, Kansas City, for 69,849 man-hours; and to G. J. Shaw, Canadian Pacific, Port McNicoll, for 63,458 man-hours.

The two cups awarded for the year's best records were provided by the Hart-Carter Company (cleaners, separators), Minneapolis, and by Ben J. Many Corporation, (re-surfacing, weatherproofing contractors) Chicago. The two trophies for the all-time records were with the compliments of H. H. Robertson Company (vents, ventilators, protected metal), Pittsburgh, and Appraisal Service Company, Minneapolis.

Here's a List of Registrations at the 1940 Supers' Convention

▲ Those who registered at the 11th Annual Convention of the Superintendents' Society were:

Mr. F. L. Beakey, *Grain and Feed Journals*, Chicago.
 Mr. and Mrs. J. Belanger, Manitoba Pool Elevators, Fort William.
 Mr. W. H. Biggar, Canadian Pacific Elevator, Port McNicoll, Ontario.
 Mr. Norman Boadway, Collingwood Terminals, Collingwood, Ontario.
 Mr. R. B. Bowden, Grain and Feed Dealers' National Association, St. Louis.
 Mr. and Mrs. H. C. Brand, Quaker Oats Company, Cedar Rapids, Iowa.
 Mr. John Burton, Eastern Terminals, Port Arthur, Ontario.
 Mr. P. H. Christensen, Van Dusen-Harrington Co., Minneapolis.
 Mr. Douglas Clark, Toronto Elevators, Toronto.
 Mr. F. J. Connolly, Canadian Pacific Elevator, West St. John, New Brunswick.
 Mr. J. R. Coughlin, Brooks Elevator Company, Minneapolis.
 Dr. E. W. Crampton, Macdonald College, Quebec.
 Mr. Elmer B. Enger, International Milling Company, Buffalo.
 Mr. Earl R. Evans, Evans Elevator Company, Champaign, Illinois.
 Mr. E. E. Frauenheim, Jr., Monarch and Seneca Elevators, Buffalo.
 Mr. and Mrs. J. R. Gibson, Hallet-Carey-Swart Company, Fort William.
 Mr. H. Grant, Eastern Terminal, Port Arthur, Ontario.
 Mr. C. H. Halsted, Washburn-Crosby Company, Buffalo.
 Mr. and Mrs. N. E. Heels, Great Lakes Elevator Co., Owen Sound, Ontario.
 Mr. H. L. Heinrikson, Terminal Grain Corporation, Sioux City, Iowa.
 Mr. Clem Herdegen, International Milling Company, Buffalo.
 Mr. and Mrs. Ralph Hetherington, Canadian Government Elevators, Fort William.
 Mr. John J. Hill, Innis, Speiden and Company, New York.
 Mr. H. J. Hixson, Continental Grain Company, Kansas City.
 Mr. C. L. Higbie, Ben J. Many Corporation, Toledo.
 Mr. Lewis Inks, Quaker Oats Company, Akron, Ohio.
 Mr. and Mrs. L. C. Irwin, Searle Terminal Company, Fort William.
 Mr. W. H. Kamp, Ralston-Purina Company, Kansas City.

Mr. W. H. Kent, Kent Equipment Company, Chicago.
 Mr. Sandy Keir, Arcady Farms Milling Company, Chicago.
 Mr. and Mrs. S. C. Klaus, Zeleny Thermometer Company, Chicago.
 Mr. and Mrs. Maynard Losie, Hallet and Carey Company, Minneapolis.
 Mr. John H. Lyle, Ralston-Purina Company, Buffalo.
 Mr. Russell Maas, Screw Conveyor Corporation, Chicago.
 Mr. T. C. Manning, Uhlmann Grain Company, Kansas City.
 Mr. Ben J. Many, Ben J. Many Corporation, Chicago.
 Mr. E. J. Martin, Norfolk and Western Railway, Norfolk, Virginia.
 Mr. Wells Martin, Martin Varnish Company, Chicago.
 Mr. Clarence Maxwell, Manitoba Pool Elevator, Fort William.
 Mr. Grover Meyer, Kansas City Power and Light Company, Kansas City.
 Mr. Richard Miller, *Miller Publishing Company*, Minneapolis.
 Mr. Joe Mosey, *Grain Magazine*, Chicago.
 Mr. Robert B. Muir, Storrar Manufacturing Company, Weston, Ontario.

Society Ladies Are Entertained

▲ The theatre, inspection of the Royal York Hotel, (biggest house-keeping job in the British Empire), shopping tours, a conducted tour to Niagara Falls entertained the ladies attending the 11th Annual Convention of the Supers Society at Toronto.

Starting early Monday morning a chartered bus drove past Toronto historical spots, parliament, the University, golden door-knobbed Casa Loma, the harbor, the beach—still icy. Tuesday's trip to Niagara Falls was an all-day drive along the north shore of the lake with luncheon in the hotel overlooking the falls in which once lunched King George, Queen Elizabeth.

Wednesday morning was spent wandering through the Royal York's kitchens, pantries, linen closets; while shopping tours along Toronto's Younger street filled Wednesday afternoon. Most popular Canadian bargain: furs, woollens, silver, Wedgwood.

Mr. John Murioss, Goderich Elevator Company, Goderich, Ontario.
 Mr. Hugh McIntyre, Copeland Flour Mills, Midland, Ontario.
 Mr. and Mrs. James Mackenzie, Three Rivers Grain and Elevator Company, Three Rivers, Quebec.
 Mr. and Mrs. Frank J. McLean, Parrish and Heimbecker, Limited, Port Arthur, Ontario.
 Mr. and Mrs. T. C. Macnabb, Canadian Pacific Railroad, West St. John, New Brunswick.
 Mr. and Mrs. G. S. McPhee, Hart-Emerson Company, Limited, Winnipeg, Manitoba.
 Mr. and Mrs. E. I. Odell, Davis-Noland-Merill Grain Company, Kansas City.
 Mr. Victor Oliver, Superior Separator Company, Minneapolis.
 Mr. and Mrs. Oscar W. Olsen, Globe Elevator Company, Duluth.
 Mr. Harry B. Olson, Harry B. Olson Co., Chicago.
 Mr. A. B. Osgood, The Day Company, Minneapolis.
 Mr. G. L. Parsons, Goderich Elevator Company, Goderich, Ontario.
 Mr. and Mrs. Percy C. Poulton, N. M. Paterson and Company, Fort William.
 Mr. and Mrs. R. B. Pow, Reliance Grain Company, Fort William.
 Mr. R. E. Preston, Aberdeen Elevator Company, Tiffin, Ontario.
 Mr. Victor H. Reid, Hart-Carter Company, Minneapolis.
 Mr. Henry Richardson, Richardson Scale Company, Passaic, New Jersey.
 Mr. A. A. Scream, Toronto Elevators, Toronto.
 Mr. and Mrs. Gilbert Schenk, Weevil-Cide Company, Kansas City.
 Mr. G. J. Shaw, Canadian Pacific Elevator, Port McNicoll.
 Mr. and Mrs. Fred A. Sibbald, Grand Trunk Pacific Elevator, Fort William.
 Mr. J. A. Smith, Sarnia Elevator Company, Sarnia, Ontario.
 Mr. C. Snidal, Dunlop Tire and Rubber Company, Winnipeg, Manitoba.
 Mr. and Mrs. Walter H. Teppen, Occident Terminal Company, Duluth.
 Mr. W. A. Thomson, Jr., Thomson Grain Elevator, Louisville, Kentucky.
 Mr. H. W. Webb-Peploe, Ben J. Many Corporation, Chicago.
 Mr. B. I. Weller, B. I. Weller Company, Chicago.
 Mr. Harry Wilson, Toronto Elevators, Toronto.

INSECT INFESTATION

IN STORED GRAIN

By R. T. Cotton

Bureau of Entomology and Plant Quarantine
United States Department of Agriculture

THE biggest recorded struggle against the insect pests of stored wheat is said to have taken place in Australia in 1918-19. At the end of 1916 the British Government purchased 3½ million tons of wheat in Australia. That is slightly more than 100 million bushels. Owing to the tie-up of shipping due to submarine activity in 1917 it was impossible to move the grain, much of which, in the absence of available elevator storage, was stacked in bags on the open ground. Infestation of this wheat by the rice and granary weevils and the lesser grain borer and destruction by rodents are said to have caused the loss of millions of bushels. Entomologists sent out from England to study the situation succeeded in controlling the infestation by fumigation and heat sterilization; and by drying out the wheat, they also prevented serious loss from reinfestation.

Warmth and Moisture

▲ Insect pests in wheat and its products thrive in the presence of warmth and moisture. During the last year, in the area of the United States where hard red winter wheat is grown, excess rain fell during harvest; and the weather remained warm until after December 15. Consequently, another big struggle with insects took place that exceeded anything similar in our recent experience. Reports received in the fall of 1939 indicated that infestation in stored grain in the Missouri, Mississippi, and Ohio Valleys was the most serious observed in 20 years.

This infestation did not originate in the field. Samples of wheat taken from the field at harvest time from all parts of Kansas failed to show the presence of either the rice weevil or the Angoumois grain moth in any case; but infested feed, screenings, or grain remaining in bins or farm buildings always provide sources that cause trouble whenever the new grain is in a condition favorable to the development of these insects. This year

Two Factors

As factors in the problem of infestation, the moisture content of stored grain and the temperature of the grain mass itself are becoming more and more important.

Here Dr. Cotton discusses the characteristics of the many insects that attack grain and gives the temperatures at which these insects die.

much of the new grain went into storage with a moisture content of 14 percent or more, a condition highly favorable to insect development. As a result, infestation developed in nearly all farm-stored grain in the eastern half of Kansas and probably throughout Texas, Missouri, and Oklahoma.

A survey covering all parts of one county in central Kansas showed that, as indicated by quart samples of grain taken from farmers' bins, about 93 percent of the grain was infested with from 1 to 205 insects per quart sample. Ten different species of insects were found commonly in this wheat, the most abundant being the flat grain beetle, the cadelle, the saw-toothed grain beetle, the rice weevil, and the granary weevil.

New Insects

▲ In addition to those common pests, two new species were taken that had never been found before in this region. In fact until this year one of these species, *Cynæus angustus*, had never before been known to attack stored grain. It is hard to tell whether these insects will ever be of economic importance; but the insect pests of stored grain have been distributed all over the world in shipments of grain, and every so often a new pest becomes established that causes serious losses. An example of a recent introduction is the lesser grain borer that was introduced into this country during the last World

War in shipments of the grain from Australia that had become so badly infested through improper storage while awaiting transportation. Since its introduction this insect has become widely distributed in the United States and is particularly destructive and abundant in the grain-growing area of the Southwest. It is a strong flier and breeds in grain that has a very low moisture content. It probably is destined to be one of the worst insect pests of stored grain in this country.

Wheat in the Great Plains area is usually low in moisture content at harvest time, and relatively little damage occurs from weevil attack in normal years. Grain weevils are dependent on their food supply for moisture to carry on their vital life processes; and if the food has less than 9 percent of moisture, the necessary water can be obtained only by breaking down the food reserves of the body. Loss of weight results from this consumption of the reserve body tissues, and the weevils eventually die. The effectiveness of low moisture content in preventing damage to grain from weevil attack is well shown by the comparative freedom from weevil damage of wheat in the Pacific Northwest where wheat as usually harvested has a moisture content of only 8 or 9 percent. Of 25,548 carloads of grain inspected in Oregon and Washington from July 1 to November 30, 1939, only 0.2 percent graded weevily.

Grain suffered considerable damage during the last season from "heating" or "bin burn." Insects in stored grain sometimes cause heating and if left undisturbed may keep grain hot throughout the winter in spite of prevailing low temperatures outside. If the moisture content of the grain is not too high, the killing of the insects by fumigation usually results in a return to normal temperatures.

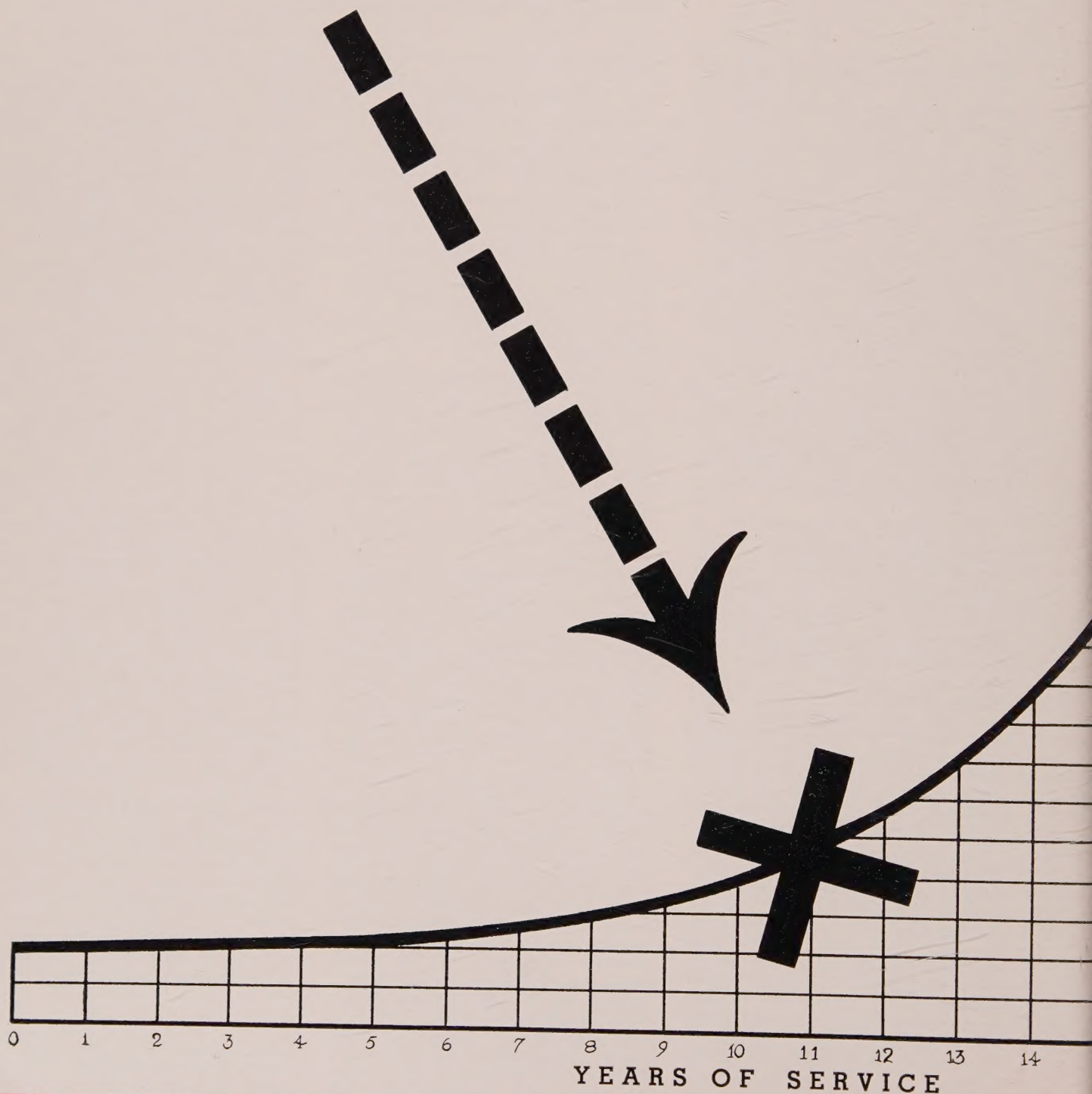
Theories of Heating

▲ Many theories have been advanced to account for the heating caused by insects. It has been observed that the

(Continued on page 16)

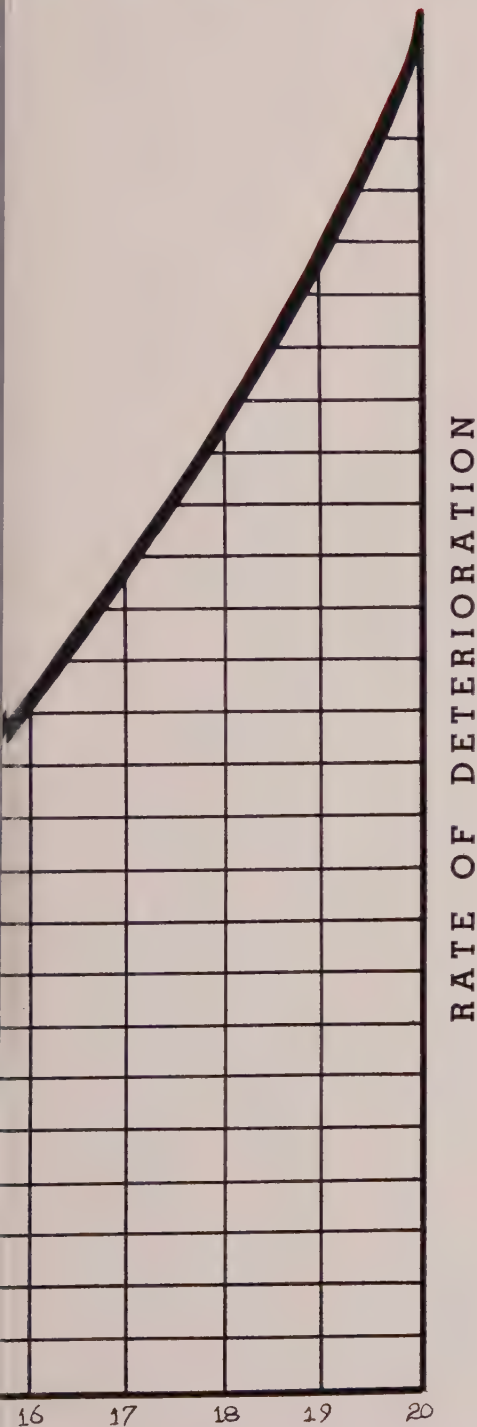
*Address delivered before the Society of Grain Elevator Superintendents of North America, Kansas City, Kans., Feb. 20, 1940.

X *MARKS*



Call in **BEN J. MANY**

THE SPOT



BYOND that "spot" damage spreads very rapidly. That means a loss in structural values (sometimes irreparable) as well as costly losses in grain damage.

Have you ever noticed that for a certain number of years no cracks or deterioration is visible? **BUT** when you reach that "spot"—**L-O-O-K O-U-T**, for beyond that, your structure will disintegrate with ever-increasing rapidity!

Just what is disintegration and how does it progress? The entrance of water into the concrete is the sole cause of the trouble. This results in corrosion of the steel, freezing and thawing, and the other deteriorative actions.

Isn't it obvious then that before your structure reaches that "spot" there are very few cracks through which the water will enter and the concrete is not absorbent enough to permit the moisture to reach the steel? But with time the number of cracks increases and the concrete becomes more absorbent.

And once this condition develops, the increase in porosity will rapidly spread.

S-O W-H-A-T?

Can you afford to let this continue?

Remember the old "stitch in time . . ."

CORPORATION

30 N. LA SALLE ST.
CHICAGO, ILLINOIS

A Veteran of 1914
Writes His Memoirs

A Peek Into the Past

When Elevators Ran at Tremendous Pace

By H. W. Feemster

Retired Superintendent, Western Maryland Elevator

HOW natural it is in the universal scheme of things for the young to look forward to the future and for those who have passed the peak to look back to the years when they had an active part in the industry which keeps the world living and moving along its unchanging course through the ages.

Now, since I am a member of the latter group, it is very natural—when comfortably seated in the old easy chair and with the faithful briar drawing free—to indulge in a memory trip back over the hectic days of the World War and for several years thereafter, when the export grain elevators were operating at about 120% of their rated capacities.

During those trying days, all the export houses—no matter where they were located—were experiencing the same trials as we at the Western

Maryland Railroad elevator in Baltimore. So we take no credit nor do we intimate that we had any monopoly on the headaches.

Ships Waiting

▲ During the time from 1916 until a few years after the war, the exporting of grain of all classes was very heavy; and we always had three or four ships loading at the dock with a list waiting in the harbor for a berth. After a few days allowed for loading, the ships would go on demurrage of from \$500 to \$2,500 a day, depending on the tonnage of the vessel.

In view of this fact, all the grain merchants who had ships loading or who had ships waiting for a berth would keep the telephone jangling with "hurry, hurry, hurry." The steamship companies and the steve-

dore companies echoed the same refrain. So in order to keep up this never-ceasing flow of grain to the ship we were straining every effort to keep the grain coming in on the other side of the house.

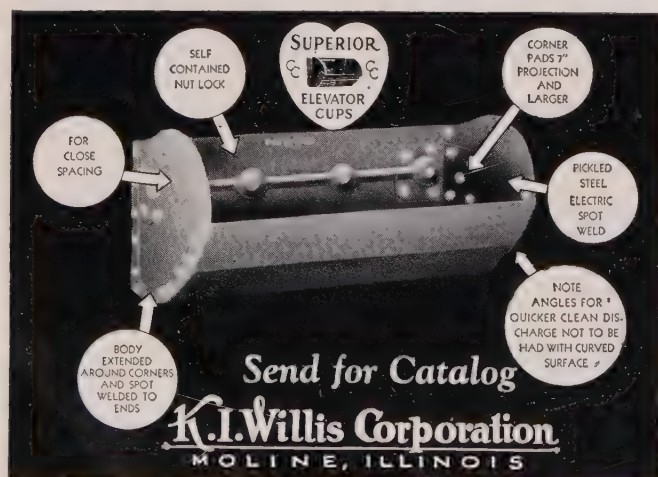
There our troubles were not few, for we were unloading with power shovels; and since the other war industries paid higher wages than we could, it was a never-ending struggle to get, train and keep enough car shovelers for the day and night crews to keep us going.

Delay in Transit

▲ Then we often had the heart-breaking fact to face that we had a ship loading and a part of her cargo had been held up in transit. The whole system would be thrown out of step whenever we had to substitute something else or switch out what we had in the house so that we could unload this rush stuff on arrival.

Now with all this hurry and hustle to unload cars and keep the ships loading we had an unusual strain on our tempers and religion trying to keep up with the cleaning, mixing and drying of the various kinds of stuff the merchants called wheat, corn, rye, oats or barley and expected us to make grade. Then we had the usual amount of breakdown in equipment or accidents which added their toll of gray hair. But with all our struggle to keep up we often had an amusing incident to relieve the strain on the old nerves. One of these was both amusing and trying at the same time.

One day we received an order from a merchant to deliver 750,000 bushels of No. 1 Manitoba wheat to three Greek ships for the Greek government, to be loaded under the supervision of their representative. When the first ship arrived on which their representative appeared, we found that this representative was an ordi-



Peek Into the Past . . .

nary grain man in no sense of the words. He was a half brother or a cousin to the King of Greece. His Royal Highness, unfortunately, could not speak English any better than I could speak Greek, so we had to get an interpreter.

The Blow Falls

▲ Then the blow fell. His Royal Highness demanded that every bushel of that lovely No. 1 Manitoba wheat be cleaned before delivery to his ship. Well, we produced a sample of the wheat and argued and pleaded with him to see the folly and delay in cleaning all that 750,000 bushels. But to no avail. We had to stop all other handling operations in the house and put on a 24 hour a day program to clean all this wheat, which was the outstanding crime of the age.

However, we got started on his ship next day and His Royal Highness was by my side when we started. He saw his cleaned wheat flowing on the conveyor belt in the basement, we went to the scale floor and saw his precious wheat through the glass, and then we went to the gallery and saw the same wheat flow out over the conveyor belts to his ship. He seemed quite pleased; but when he saw the same wheat flowing into the hold of the ship and a cloud of dust coming out of the hold, His Royal Nibs was fit to be tied. He would have no dust on his wheat.

We had no interpreter with us at the time so he and I had a grand session for the next hour. He waved his hands, tore his hair and gabbered like a flock of ducks. After trying to show him how nice his wheat was and how impossible it was to load any grain without the abrasion of the flowing grain creating a dust, I lost my temper and what I told his branch of the Greek nobility should have made him forget the dust in the wheat. I was safe, though, for he didn't savy a word.

Anyhow, I would not shut the ship off and he finally went to town to see the merchant who had sold him the wheat. I guess the merchant convinced him that it was all right, but he stood around and was a Royal nuisance till the last ship was loaded.

And so I often sit and think back over the many experiences that we had in those busy days of long ago. If I had had the power of old Joshua to make the sun stand still, I expect the world would have waited a good long time for its dinner more than once.



Is It Profitable

**To Buy Power in Any Form for Use Against
Needless Back Pressure on Aspirating
Equipment or Dust Collecting
Systems?**



Here's a case record taken from our files that is only one among many that have proved it *pays* to use Day engineered installations and DUAL-Clone Dust Collectors.

GRAIN CLEANER APPLICATION

Operating on a cleaner with an independent fan, a long cone cyclone delivered 4,000 C. F. M. with 3½" collector resistance. An attempt to overcome the lack of aspiration by the use of a larger fan resulted in no appreciable increase in air volume.

A Dual-Clone collector installed as a replacement of the cyclone delivered 5,000 C. F. M. with 1" collector resistance, using the original fan. The low back pressure characteristic of the Dual-Clone produced the necessary increase of air volume for aspiration at no increase in power consumption.



Increased
Air Volume
for Aspiration

Write today. A Day representative will study your particular problems before making a recommendation.

The DAY Co.
2938 Pillsbury Ave., Minneapolis, Minn.

In Canada, The Day Company of Canada, Ltd.

For Want of a Nail the Shoe Was Lost

FOR want of a shoe, the horse was lost.
For want of a horse, down went the
rider. At least that's the way the old copy
books tell the story.

You sometimes hear such a state of affairs
called the "inevitable chain of circum-
stances." But no matter what you hear it
called it simply means that it doesn't pay
to take chances. A minor economy may
often lead to a major loss. And on the other
hand a minor expenditure may often in-
sure you against those major expenses that
can be very costly.

No, it doesn't pay to be penny wise and
pound foolish. The moment your grain
shows signs of heating, call on that de-
pendable grain fumigant to forestall any
great loss from infestation. Use Weevil-
Cide, standard to the industry. Just pour
it on the grain stream as it moves into your
bins. Write today for information.

The Weevil-Cide Company

1110 Hickory St.

Kansas City, Mo.

John Bush in Air Force

A NOTE from
John S.
Bush, formerly
associated with the
Kingston Eleva-
tor Company,
Kingston, Ont.,
indicates he is
now a member of
the Royal Cana-
dian Air Force,
quartered at Trenton, Ont. Happy
Landing!



★ Products Displayed At 11th Convention

▲ Among the exhibits at the conven-
tion hall in Toronto were two separa-
tors, a sampler, resurfacing treat-
ments.

Victor Reid, representing the Hart-
Carter Company, demonstrated clean-
ing and separating machinery with
the aid of printed descriptions.

The Ben J. Many Corporation ex-
hibit displayed photographs of resur-
facing, weatherproofing jobs that had
been completed.

Harry B. Olson demonstrated the
Cargill automatic sampler which he
handles through his Chicago office.

Victor Oliver set up an open-face
separator built by the Superior Sep-
arator Company for demonstration
purposes.

★ ARE YOU?

(By Gertrude K. Marshall)
(Suggested by Claude Darbe)

Are you an active member
The kind that's liked so well,
Or are you just contented
With the button on your lapel?
Do you attend the meetings,
And mingle with the flock,
Or do you stay at home
And criticize and knock?
Do you take an active part
To help the work along,
Or are you satisfied to be
The kind that "just belong?"
Do you ever go to visit
A member that is sick?
Or leave the work to just a few
And talk about the clique?
There is quite a program scheduled
That I'm sure you've heard about
And we'll appreciate if you, too
Will come up and help us out.
So come to the meetings often
And help with hand and heart,
Don't be just a member,
But take an active part.
Think this over, member,
You know right from wrong.

ASKS COOPERATION ON LAWS

STATE codes on health and safety are soon to come up for public hearing, according to Joseph T. Faust, chief deputy of the division of factory inspection, Illinois Department of Labor.

Mr. Faust made the announcement before a recent meeting of the Chicago Superintendents' Chapter when he asked cooperation in developing high type inspectors. C. J. Alger, president of the Chicago chapter, brought up the subject of uniformity in state requirements among the different states; and Harold Winkler of the Alfred C. Goethel Company, Milwaukee, said that "to-day we have no uniformity of standards. The inspectors of various states should get together and take the dust hood off the head. The best should be taken from each state's set of standards and the rest discarded. I think that one place we could start improving conditions is to enclose hoppers and apply suction on old-type tunnels."



PENSION PLAN ADOPTED

A CONTRIBUTORY pension system affecting 7,300 employes has been adopted by General Mills, Inc., according to an announcement by the president, Donald D. Davis of Minneapolis.

Provided by the plan are retirement allowances at the age of 65; disability allowances after 10-years' service; special allowances to employes involuntarily released from service between the ages of 60 and 65; death benefits for employes dying while in active service; and the return of contributions to employes leaving the service before reaching retiring age.



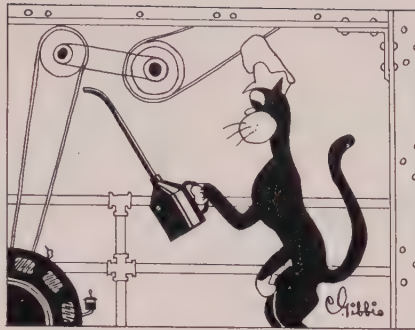
Liked It

I HAVE just received the latest issue of GRAIN and think there are some exceptionally good articles in it.—G. J. Shaw, C. P. R. Elevator, Port McNicoll, Ont.



WHY IS IT?

WHY is it that when two non-explosive agents are brought together, they explode? Do the gas and the dust in elevators cause explosions?



SNOOPER

THE BOILER ROOM CAT
The 'Old Oil' may keep your home running smoothly, but see that you use the best in your plant.

Sprinklers Not Mandatory

I DO NOT know of any mandatory requirements for the installation of sprinkler systems in terminal grain elevators, although it may well be that such requirements have been made by some state or insurance authorities. In our Safety Code for the Prevention of Dust Explosions we recommend automatic sprinklers for the protection of combustible elevators and in certain cases for the protection of combustible contents of elevators of fire-resistive construction. This, however, is only an advisory recommendation.—Robert S. Moulton, Technical Secretary, National Fire Protection Association, Boston, Mass.

Grain Institute Offers Mail Course

THE Grain Exchange Institute, sponsored by the Association of Grain Commission Merchants of Chicago, of which A. W. Mansfield of Thomson & McKinnon is president, is again offering a mail course of twenty lectures and lessons covering all phases of grain marketing and trading, both domestic and foreign.

This correspondence course is an extension of the class room course of instruction on "Grain and Its Marketing" sponsored by the association now running in Chicago, which has been an outstanding success.

The course is available to all persons interested in grain marketing and in the past has been taken advantage of by men and women desiring to acquaint themselves with the underlying marketing conditions and the factors that influence prices, as well as the technical phases of the trade that would qualify them for better positions. In addition, many persons have enrolled because of the insight into the real mechanics of the grain trade made available.

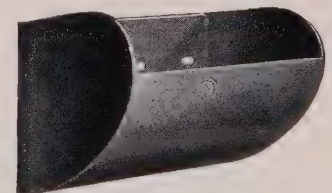
Previous enrollments have included a large number of people throughout the continent. All persons interested may obtain full details describing the course by addressing the Grain Exchange Institute, 859 Board of Trade Building, Chicago, Illinois.

THE CALUMET

(Protected by U. S. & Foreign Patents)



Increased Capacity
Perfect Discharge
Superior Wearing
Quality



We can also furnish these buckets in a new rustless, non-sparking metal for flour and soft feed. Less than one quarter the weight of steel and at a fraction of the price of standard stainless steel.

We handle a complete stock of Norway Flathead Bucket Bolts and Spring Washers.

B. I. WELLER

SOLE OWNERS of the patent and
SOLE Licensed Manufacturers in the
U. S. under this patent.

220 W. Chicago Ave., East Chicago, Ind.

327 S. La Salle St., Chicago, Ill.

THE STRONG-SCOTT MFG. CO., LTD.
Toronto WINNIPEG Calgary
Licensed Manufacturers for the Dominion of Canada

R. R. HOWELL & CO.,
Minneapolis, Minn.
Northwest Distributors

Moisture and Temperature Mean Insects

(Continued from page 9)
presence of large numbers of insects causes an increase in the temperature and moisture content of grain, which in turn may be responsible for a further release of heat energy from the respiration of the wheat itself.

The body temperature of insects normally follows pretty closely that of their environment, but when they are active their temperature rises. If they are clustered together in large numbers this increase in temperature tends to cause hot spots in the grain in which they are breeding. The production of both heat and moisture is an end product of respiration and oxidation of the body tissues. One scientist has calculated that the theoretical production of water and heat from the oxidation of a carbohydrate at room temperature is such that it should take 100 rice weevils about 5 days to raise the temperature of 1 gram of wheat 1 degree centigrade, and about 100 days to raise the moisture content of 100 grams 1 percent.

At ordinary temperatures wheat with a moderate moisture content does not respire at a rapid rate, but with a rise in temperature and moisture content there is a rapid increase of respiration. This biological oxidation of the carbohydrates of the wheat kernels produces added mois-

ture and heat, resulting in the final decomposition of the grain. There are doubtlessly other factors involved in the heating of grain, but those discussed above probably are the most important when insects are present.

The period of cold weather that was experienced during January, 1940, has caused considerable speculation as to the effect these low temperatures may have had on insects in stored grain. These insect pests are for the most part of subtropical origin and do not hibernate; for in their native habitat they have never had to adapt themselves to low temperature. Consequently, they have developed no great resistance to cold. They are rarely exposed to extremes of low temperature since grain in storage is a poor conductor of heat. It both absorbs and gives off heat slowly and usually remains all winter above the freezing point of water.

Low Temperatures

▲ The rice weevil is dormant at temperatures of 45° F. or below and the granary weevil at 35° or below. If, therefore, the temperature of grain infested with these weevils can be brought below 35° both these insects eventually will die. Hibernating insects can endure long periods of dormancy, since in that condition their

life processes are carried on at a very low rate and their food reserves are used up slowly. The rice and granary weevils do not hibernate, and they differ from hibernating insects in that their life processes are not retarded sufficiently to allow the food reserves to carry them through an extended period of dormancy, and as a result they die from starvation in a comparatively short period. To be quickly effective against stored-grain insects, temperatures must be rather low, for insects that do hibernate, as the cadelle, are highly resistant during winter (the normal hibernating season) even to rather low temperatures.

Exposure to zero Fahrenheit for 1 day is sufficient to kill all stages of the rice weevil, the granary weevil, the lesser grain borer, and the saw-toothed grain beetle. In fact few of them can withstand more than a few hours' exposure to this temperature.

As a rule the eggs of the grain-infesting insects are not particularly resistant to cold, but the eggs of the Mediterranean flour moth have been found to survive a temperature of 30-35° F. for 30 days. Eggs of the granary weevil survived this temperature for 28 days, but those of the rice weevil for only 4 days. Eggs of the cadelle survived a temperature of 20-25° F. for 6 days and eggs of the Mediterranean flour moth for 13 days.

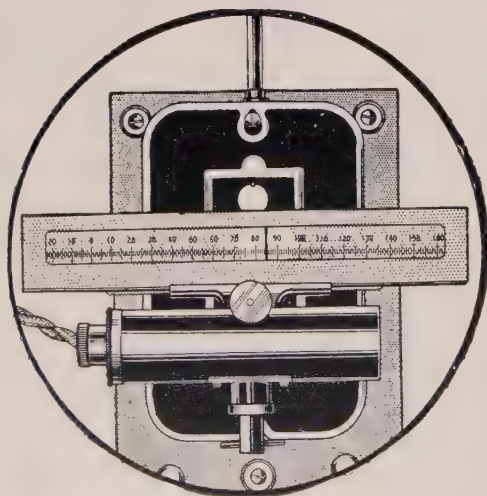
Cooling Grain

▲ Stored grain can be cooled by turning or "high lining" during cold weather, but the practicability of using this method to eradicate insect infestation from stored grain or to prevent further damage will depend on the temperature of the grain at the start and the prevailing air temperatures.

The temperature of grain cannot be lowered many degrees by a single turning; and if the prevailing air temperatures are not decidedly low, it may be impossible or too costly to reduce the temperature below the danger point.

Turning, however, will break up hot spots in bins, caused by developing colonies of insects. By mixing the warm and cool portions of the grain the general temperature is improved. If it is impractical to cool infested grain to a point where further damage from insects will be prevented, the grain should be fumigated with one of the standard grain fumigants.

"Don't lose a bushel while your grain is in storage!"



The watchful eye of this instrument reaches all parts of your storage.

ESTIMATES WITHOUT OBLIGATION

ZELENY THERMOMETER COMPANY

542 South Dearborn Street
Chicago, Illinois

Humor . . .

HIS STYLE

A Londoner rang up to inquire the fare to Ealing, but the man at the other end of the line couldn't catch the name of the station, so, in desperation, he asked the inquirer to spell it. The reply came as follows.

"E—for 'Erbert, A—wot the 'orses heat, L—w're yer goes when yer dies, I—wot yer sees wif, N—wot lays a hegg, G (long pause)—Gor' blime."

WARNING

The negro pastor was preaching on the burning question, "Is there a Hell?"

"Bredern, de Lord made de world round like a ball."

"Amen," agreed the congregation.

"And de Lord made two axles for it to go round on, one at de North Pole and de other at de South Pole."

"Amen."

"And de Lord put a lot of oil in de middle of de world to keep de axles well greased."

"Amen."

"And den a lot of sinners dig wells in America, in Russia, and in Persia, and steal de Lord's axle-grease. And some day there won't be no more oil, and dem axles is gonna git hot. And dat will be Hell, bredren, dat will be Hell."

AND NO HEAT

Guide: "This castle has stood for 600 years. Not a stone has been touched, nothing altered, nothing replaced."

Visitor: "Um, they must have the same landlord we have."



Courtesy Chicago Daily News
"One more crack about a raise and you're fired!"

THERE WAS A YOUNG LADY FROM NIGER . . .

Thus begins the sad, sad story of the lady who flirted with a tiger. And how the story ended everyone knows too well.

It isn't a good policy to go flirting with tigers, nor is it wise to make light of the dust in an elevator. That fine dust which readily suspends itself in the air in explosive concentrations is dangerous dust. One little spark, from tramp metal in the grain stream, from static, from friction . . .

ROBERTSON SAFETY VENTILATORS remove the more explosive fine dust from elevator legs by continuous gravity action.

They release pent-up gases and flames in case of an explosion. And they minimize the possibility of a secondary explosion by continuously venting gases and dust.

ROBERTSON CAPACITY BIN VENTILATORS will provide a balanced ventilation for your grain bins. They are guaranteed not to give more than .0026 water gauge resistance and not less than 324% free area outlet vs. stack area.

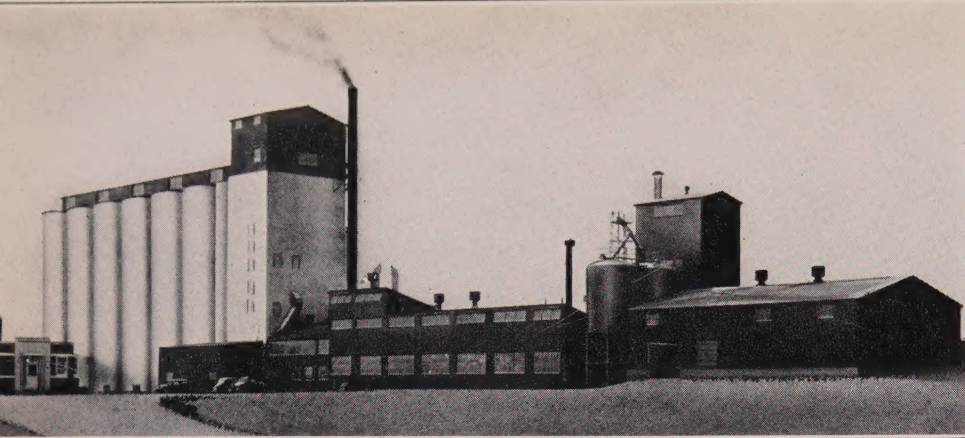
ROBERTSON PROTECTED METAL makes the ideal siding and roofing for terminal buildings. Its corrugated steel base is protected from corrosion by asphaltic and asbestos coatings. Its service record all over the world is proof that it will last—without maintenance cost.

Write Today For Details

H. H. ROBERTSON CO.

Farmers Bank Bldg.

Pittsburgh, Pa.



A New Industry Gets Two New Mills

▲ Soybean processing, among the newest and fastest growing of chemurgic industries, has been centered in Illinois and Indiana where the crops from nearly two million acres were handled last year. Indications that the industry is spreading both east and west can be found in these two new mills built and operated by Swift and Company.

The two mills, top one at Des Moines and bottom one nearing completion at Fostoria, Ohio, both have a storage capacity of 450,000 bushels provided by 24 foot tanks, 90 and 106 feet high. These will be filled twice a season for a total of nine million bushels each.

Both use four super presses to handle 2,600 to 2,800 bushels a day. Three carloads of soybean oil meal for use as a protein concentrate in

feeds will be produced each day, and every third day a tank car of oil is shipped to vegetable oil refineries in New Jersey, North Carolina, Georgia and Florida.

Workhouses of both mills are of reinforced concrete and are equipped to clean and dry. Facilities are available for receipts from both cars and trucks.

Storage space at the Swift Champaign mill in Illinois will be increased this spring from 600,000 to one million bushels and pressing capacity will be increased to 7,000 bushels a day.

H. R. Kampert is superintendent of the Champaign mill; A. S. McGinnis of the Cairo, Illinois, mill; C. H. Graham at Des Moines; and A. J. Sibley will be in charge at Fostoria, Ohio.

Kansas City Elects Officers

▲ Claude L. Darbe, Simonds-Shield-Theis Grain Co., was elected president of the Kansas City Chapter of the Supers' Society at the regular monthly meeting on April 16th. William Deegan was named first vice president, Wilbur Holte, second vice president and P. A. Kier, secretary-treasurer.

The regular March meeting of the Chapter was sponsored by the managers. The 79 attending heard J. E. Nugent explain the provisions of the Wagner Act.

The new officers succeed W. H. Kamp as president, and Claude Darbe as secretary-treasurer, under whose tenure the Chapter won the Society's award for new members presented at the Toronto convention.

★ Baltimore Meets

▲ A very enthusiastic meeting of the local elevator superintendents was held at the Lord Baltimore Hotel on March 12.

★ Loading Declines

▲ Grain and Grain products loaded during the week ending April 4 were up to 34,540 cars, but fell back to 30,108 cars during the week ending April 11, according to reports of the American Association of Railroads.

★ Wanted

▲ A superintendent of fifteen years' experience is looking for new connections. Just drop a card to GRAIN for his name and address if you know of a position that is open.

★ Enjoyed Toronto

▲ "We had a very enjoyable time at Toronto and feel we got a lot of good information from the many talks and pictures as well as from our personal contacts with the other members."—H. C. Brand, Quaker Oats Co., Cedar Rapids, Iowa.

★ Chicago Chapter Will Visit Decatur

▲ Saturday, May 4th, has been set as the date of the Chicago Chapter's visit to the Decatur, Illinois, soybean plant of the Archer-Daniels-Midland Company.

Meeting at the Wabash, Polk Street Station, the crowd will have a special coach leaving at 11:35 in the morning. A group rate of \$4.25 round trip will be allowed if 30 are enrolled for the trip.

Omaha Invites

▲ J. L. Haugh, President of the Omaha Chamber of Commerce, has invited the Supers' Society to meet in Omaha for their 13th Annual Convention in 1942.



Always Useful

▲ "I would like to express my appreciation of the magazine GRAIN, which always contains something useful to those of us engaged in this game."—Ken S. Miller, General Foreman, Canadian Pacific Elevators.



Service Club President

▲ J. A. Smith, Sarnia Elevator Company, Sarnia, Ontario, is President of the Sarnia Chamber of Commerce and Vice-President of the Sarnia Rotary Club. Mr. Smith was general convention chairman at Toronto and held open house for all the delegates.



Missouri Shows Up

▲ Lack of moisture is a serious condition in every state west of the Mississippi except Missouri. There a generous covering of snow until early spring and rain after the thaw has conditioned the soil for a good crop.



CCC Reports

▲ Through April 3, 1940, Commodity Credit Corporation had outstanding loans on 105 million bushels of wheat and 273 million bushels of corn.



Sends Regrets

▲ "I would have been only too pleased to have given a talk on the subject of wheat washing as I have always advocated this advance in the process of preparing the wheat before it is milled."—Joseph I. Chamberlain, President, Association of Operative Millers.



Cooperative Plant Sold at Auction

▲ Built in 1929 by a cooperative association of 118 Gray County, Kansas, Farmers, the \$150,000 elevator at Copeland, Kansas, was sold at auction last month for \$50,150. The government, which had financed the half-million-bushel elevator, foreclosed. Purchasers were the Riffe brothers of Texahoma.

INVOICE

GRAIN MAGAZINE

Board of Trade - Chicago

May, 1, 1940

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WHAT IS THERE IN IT FOR ME?

THAT'S the simple question that you should ask; and since it is a simple question, there should be a simple answer. There should be a list of items as clear as an invoice. But it isn't that simple. There are two possible answers to the one simple question.

One is, "Not a thing."

Join the Supers' Society, attend nothing, intend nothing, write to no one, never bother to meet the other members, throw away the literature you get without looking at it, make no suggestions and you'll get nothing from it. There is no way that it could be otherwise.

The other answer is, "A regular dividend."

Join the Society, attend the meetings, listen, debate, learn, absorb, meet your fellow superintendents, write to them, suggest ways and means of improving the Society's work and you will help yourself to the unselfish thrill (not necessarily unprofitable) of serving the profession you live by, of adding to the revolving fund of skill and experience that the industry has on deposit and from which you may draw. Write the Secretary today for an application blank, and let him introduce you to the men who speak your language.

SOCIETY OF GRAIN ELEVATOR SUPERINTENDENTS

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